

Comparison of the effectiveness of Gabapentin and Hydroxyzine in pruritus in dialysis patients

Abstract

Background and Objectives: Pruritus is one of the most common problems in patients suffering chronic renal failure. 25-35% of pre-dialysis patients and 60-80% of patients during dialysis complain pruritus. The exact pathophysiology of pruritus is unknown; however, some possible interactive factors include: histamine release from mast cells and basophiles, uremic skin, cutaneous mast cells proliferation, adipose cells atrophy, electrolyte imbalance, and accumulation of bile acids. Histamine is the main proposed mediator in pruritus. The Objectives of this study was comparison of the effectiveness of Gabapentin and Hydroxyzine in pruritus in dialysis patients

Methods: In this randomized, double-blind clinical trial, 30 dialysis patients with pruritus were assigned into the study randomly and the subjects were divided into two groups A and B randomly. The Pruritus Scale questionnaire was used to measure the Pruritus. Tablet Gabapentin 100mg oral, once in a day was administered for six weeks for group (A) and Tablet Hydroxyzine 25mg oral, once in a day was administered for six weeks for group (B). Patients were evaluated after six weeks. Patients were not receive drugs for two weeks for pruritus. Then Tablet Gabapentin 100mg oral, once in a day was administered for six weeks for group (B) and Tablet Hydroxyzine 25mg oral, once in a day was administered for six weeks for group (A). Patients were evaluated after six weeks again. Finally the collected data were analyzed.

Results: 32 patients with dialysis complained of pruritus were enrolled in the study. The mean age of patients in the Gabapentin group was 58.24 ± 8.06 years with a mean age of 72- 26 years and in the Hydroxyzine group 56.7 ± 7.63 years with an age range of 34-98 years. In the first 6 weeks and second 6 weeks, there is a significant relationship between the severity of pruritus in Gabapentin and Hydroxyzine taking, and also there is a significant correlation between frequency in patients Gabapentin and Hydroxyzine taking.

Conclusion: Hydroxyzine and Gabapentin are effective drugs for controlling pruritus in renal patients. It is also suggested to study the comparing of these drugs with other drugs such as Chlorpheniramine, ketopfen and desloratadine.

Keywords: Gabapentin, Hydroxyzine, pruritus, dialysis patients, Ardabil